DOCUMENT RESUME

ED 307 418 CE 052 481

AUTHOR	Bebris, John M.; Ashmore, M. Catherine
TITLE	Summary of Ohio Entrepreneurs Survey Results. Facts & Findings. Special Issue.
INSTITUTION	Ohio State Univ., Columbus. National Center for Research in Vocational Education.
SPONS AGENCY	Ohio State Dept. of Education, Columbus. Div. of Vocational and Career Education.
PUB DATE	88
NOTE	9p.; Printed on colored paper.
PUB TYPE	Reports - Research/Technical (143)
JOURNAL CIT	Facts and Findings; spec iss Fall 1988
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Adult Vocational Education; Business Administration; Career Education; *Educational Background; *Employer Attitudes; *Entrepreneurship; Entry Workers; Outcomes of Education; Postsecondary Education; Program Effectiveness; Secondary Education; State Surveys; *Vocational Education

ABSTRACT

The Ohio Entrepreneurs Survey was conducted during the winter of 1988 to learn more about the vocational background of Ohio's business owners. A secondary purpose was to identify the opinions the business owners held about high school vocational graduates and their abilities as entry-level employees. The four-page questionnaire was completed by 9,100 business owners. Survey respondents were mostly male, predominantly white, and mainly middle-aged. Two out of three started their businesses before age 35 and generally in an urban setting. Business owners with a vocational education background, especially high school vocational education, were generally younger, started their businesses at significantly earlier ages, and were more evenly dispersed between urban and rural settings. Ohio business owners reported considerable involvement with vocational education. The percentage of Ohio business owners with some vocational education was nearly three times the national percentage. Those respondents having high school education started their businesses at substantially earlier ages, reported higher than expected levels of education, and were more likely to operate in a rural setting. Ohio business owners generally held high school vocational graduates in high regard. Implications for future curriculum and program development for vocational education were suggested. (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

Special Issue
Fall 1988

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED307418

FACTS & FINDINGS

SUMMARY OF OHIO ENTREPRENEURS SURVEY RESULTS

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

C Hansen

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

by
John M. Bebris
M. Catherine Ashmore

INTRODUCTION

Traditionally vocational educators have trained youth and adults for employment in existing businesses. Little consideration, however, has been given to the possibility that the same training could also serve as a basis for self-employment.

Recent research from the National Federation of Independent Business suggests that a great number of the nation's business owners have only a high school diploma, and many report a vocational background as well. This and similar findings suggest a new initiative to encourage entrepreneurship education in vocational education.

In keeping with this new national trend, the Ohio Entrepreneurs Survey was conducted during the winter of 1988 for the primary purpose of learning more about the vocational education background of Ohio's business owners. A secondary purpose of the study was to learn the opinions these business owners held about high school vocational graduates and their abilities as entry-level employees. The study was sponsored by the Ohio Division of Vocational and Career Education, with major support provided by the Ohio Department of Development and the Columbus District Office of the U.S. Small Business Administration.

THE SURVEY SAMPLE

A four-page questionnaire was mailed to a random sample of 40,000 Ohio business owners. The sample was drawn from the Ohio Bureau of Worker's Compensation data file which lists 200,000 Ohio businesses that employ at least one additional person, thus excluding from the survey sole proprietors and self-employed who engaged no other persons in their businesses. Of the 40,000 questionnaires that were mailed, 9,100 were completed and returned.

Little evidence exists to suggest that the business owners who completed and returned the survey questionnaire are in any meaningful way different from those business owners who chose not to complete the questionnaire. Table 1 shows a comparison between survey respondents and nonrespondents across three major business characteristics. The first "major industry group" proved no statistical difference at the $p < .05$ level of significance. Both the second and third characteristics, "total payroll—1987" and "year started" respectively, proved statistical difference at the $p < .05$ level of significance. However, these differences appear minor in degree and suggest no compelling reason to challenge the representativeness of the respondent sample. If this sample is indeed partially skewed from the survey population, then it seems skewed positively—slightly higher total payrolls for 1987 and slightly more recent in business start-up.

BEST COPY AVAILABLE

TABLE 1
SELECTED BUSINESS CHARACTERISTICS
BY SURVEY RESPONDENT NONRESPONDENT

BUSINESS CHARACTERISTIC	SURVEY RESPONDENT (Percent)	SURVEY NONRESPONDENT (Percent)	SURVEY TOTALS (Percent)
Major Industry Group			
Agriculture	7.48	7.49	7.49
Construction	4.98	5.07	5.05
Retail	15.78	15.43	15.50
Services	19.23	20.53	20.26
Other	52.42	51.48	51.69
	100.00	100.00	100.00
	(N = 8,811)	(N = 31,189)	(N = 40,000)
Total Payroll – 1987			
Zero	3.85	5.86	5.41
- $100,000	64.89	66.11	65.84
$100,000 - $499,999	23.81	20.56	21.30
$500,000 - $999,999	4.28	3.85	3.95
- 1 Million	3.28	3.61	3.50
	100.00	100.00	100.00
	(N = 8,535)	(N = 29,536)	(N = 38,071)
Year Started			
Before 1975	41.13	44.89	44.00
1975 – 1979	18.26	17.72	17.84
1980 – 1984	27.13	26.39	26.69
1985 – 1987	13.28	11.04	11.31
	100.00	100.00	100.00
	(N = 8,811)	(N = 31,189)	(N = 40,000)

SURVEY RESPONDENTS

A demographic profile of the survey respondents shows them to be traditional business veterans who operate in the industrial north central United States. They are mostly male (9 out of 10), predominantly white (96.5 percent), and mainly middleaged (84.6 percent are over the age of 35). Further, two out of three respondents started their businesses before age 35 and generally in an urban setting. A comparison of demographic profiles for the following three categories of respondent is offered in table 2:

- Business owners with some vocational education background (high school and/or adult);
- Those business owners with high school vocational education; and
- The survey totals for the demographic variables.

Accordingly, business owners with a vocational education background—especially high school vocational education—were more likely to be female, were generally younger, started their businesses at significantly earlier ages, and were more evenly dispersed between urban and rural settings.

TABLE 2
SELECTED DEMOGRAPHIC CHARACTERISTICS
BY VOCATIONAL EDUCATION BACKGROUND

DEMOGRAPHIC CHARACTERISTICS	HIGH SCHOOL AND OR ADULT VOCATIONAL EDUCATION (Percent)	HIGH SCHOOL VOCATIONAL EDUCATION (Percent)	SURVEY TOTALS (Percent)
Gender			
Male	87.20	86.44	89.09
Female	12.80	13.56	10.91
	100.00	100.00	100.00
	(N = 2,351)	(N = 1,394)	(N = 8,532)
Minority Status			
Minority	3.73	3.13	3.45
Nonminority	96.27	96.87	96.55
	100.00	100.00	100.00
	(N = 2,442)	(N = 1,438)	(N = 8,957)
Current Age			
Under 20	0.12	0.20	0.04
20 - 27	2.78	3.89	1.66
28 - 35	16.79	21.13	13.71
36 - 44	23.24	23.79	24.73
45 - 55	27.40	26.72	28.46
Over 55	29.66	24.27	31.40
	100.00	100.00	100.00
	(N = 2,478)	(N = 1,467)	(N = 9,058)
Age When Started Business			
Under 20	7.70	10.14	4.46
20 - 27	31.09	35.34	27.24
28 - 35	29.06	27.81	31.51
36 - 44	19.74	17.12	22.46
45 - 55	9.89	7.67	11.59
Over 55	2.51	1.92	2.73
	100.00	100.00	100.00
	(N = 2,467)	(N = 1,460)	(N = 8,971)
Location			
Rural	42.08	48.68	35.09
Urban	57.93	51.32	64.91
	100.00	100.00	100.00
	(N = 2,488)	(N = 1,473)	(N = 9,106)

Ohio business owners reported considerable involvement with vocational education. Forty percent of the respondents reported that they had helped a high school vocational education program. For example, as shown in figure 1, two out of three respondents had acted as co-op employers, one out of three respondents had served as program speakers, and one out of four respondents had served as either resource providers or as advisory committee members.

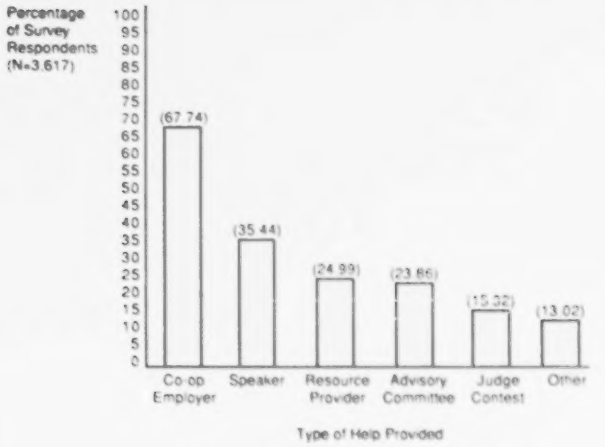

Figure 1. Percentage of survey respondents who helped a high school vocational program by type of help provided.

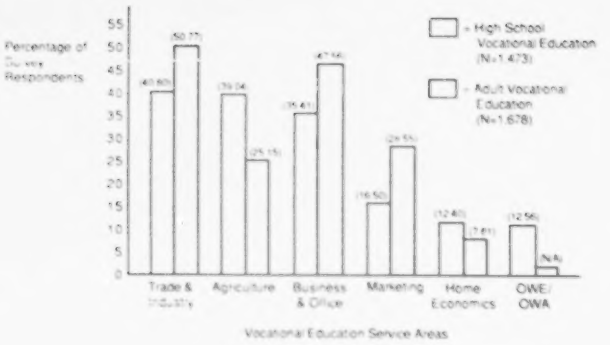

Figure 2. Percentage of survey respondents with vocational education background by vocational service area.

Although women business owners represent only 10.9 percent of the total business community surveyed, the proportion of women-owned businesses has nearly doubled in the last decade (see table 3).

TABLE 3
YEAR WHEN STARTED BUSINESS
BY GENDER OF TOTAL SURVEY
(N=8,532)

Year Started	Female	Male	Total
1980-88	16.21%	83.79%	100.0%
1970-79	9.91%	90.09%	100.0%
1960-69	7.93%	92.07%	100.0%
1950-59	4.44%	95.56%	100.0%
Prior to 1950	7.58%	92.42%	100.0%

VOCATIONAL EDUCATION BACKGROUND (HIGH SCHOOL AND ADULT)

The percentage of Ohio business owners with some vocational education is nearly three times (27 percent) the national percentage of business owners with vocational education (10 percent) as reported by NFIB in their study of the NFIB membership. One in six Ohio business owners participated in high school vocational education, and one in five participated in adult vocational education. Figure 2 shows the relative distributions of respondents having high school vocational background versus respondents having adult vocational background across the six vocational service areas.

Additionally, survey respondents with a vocational background were nearly three times more likely than their nonvocational counterparts to be in agricultural businesses and were less likely to be in either retail or service businesses, as indicated in table 4.

TABLE 4
PROFILE OF SURVEY RESPONDENTS
WITH VOCATIONAL EDUCATION BACKGROUND
BY INDUSTRY GROUP

PROFILE CHARACTERISTICS	HIGH SCHOOL AND/OR ADULT VOCATIONAL EDUCATION BACKGROUND (Percent)	NO VOCATIONAL EDUCATION BACKGROUND (Percent)	SURVEYS TOTALS (Percent)
Industry Group			
Agriculture	21.27	7.63	11.32
Construction	14.00	13.39	13.55
Manufacture Durable	8.38	8.05	8.14
Manufacture Nondurable	2.44	3.38	3.12
Transportation	2.81	2.94	2.90
Wholesale	4.21	6.54	5.90
Retail	19.04	23.33	22.15
F.I.R.E.	4.25	6.54	5.91
Services	23.79	28.19	26.99
	100.00	100.00	100.00
	(N = 2,421)	(N = 6,395)	(N = 8,816)

When estimating current annual business growth rates, vocational and nonvocational respondents showed nearly identical distributions across the categories of moderate growth and stable operations. However, as shown in figure 3, the two groups of business owners diverged significantly between reports of rapid growth or subsistence level operations. One in four vocational respondents reported either fast or very fast business growth, whereas one in three nonvocational respondents reported the same level of

growth. At the opposite end of the scale, vocational respondents were 5 percent more likely to report subsistence level operations than their non-vocational counterparts.

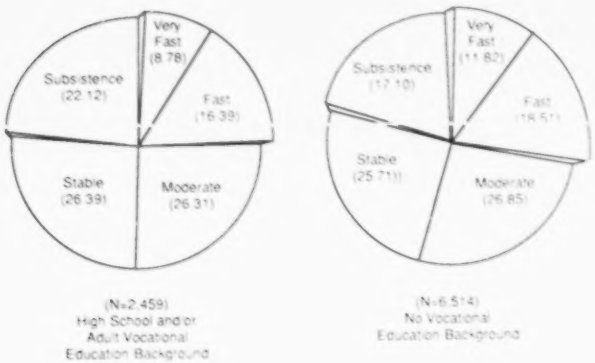

Figure 3. Estimated growth rate by vocational education background.

In reporting the method by which the respondents started their current enterprise, more than half actually started a new business. Interestingly, as revealed in figure 4, for either group of respondent, a little more than one in five purchased an existing business. The figure also shows that business owners with vocational background were 5 percent more likely to inherit a business than were business owners with no vocational education background.

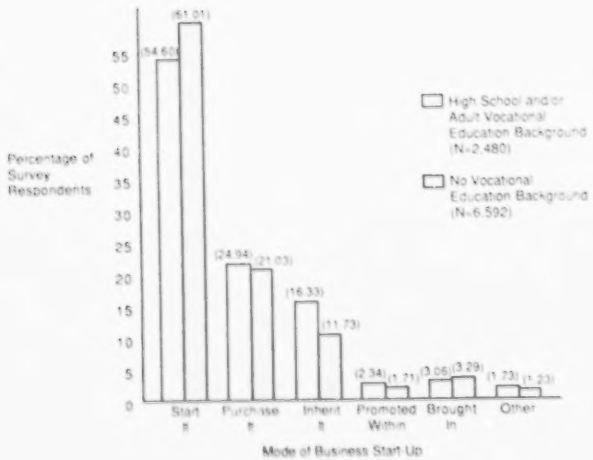

Figure 4. Percentage of survey respondents with high school and/or adult vocational background by mode of business start-up.

Ohio business owners reported general interest in further education and training experiences after starting their business. Sixty-four percent reported participation at least once a year in such training programs. Those with vocational education background were even more likely to participate in additional training each year (73 percent). When asked about their interest in 10 specific business areas, they indicated greatest interest in financial management, managing employees, and marketing. Table 5 shows specific business areas of most interest.

TABLE 5
TOP FOUR BUSINESS INTEREST AREAS BY LEVEL OF INTEREST FOR TOTAL SURVEY AND HIGH SCHOOL VOCATIONAL EDUCATION BACKGROUND

Business Interest	Interest			No Interest
	Great	Moderate	Little	
Financial Management				
Total Survey (N=8408)	38.4%	31.5%	9.8%	20.3%
H.S. Voc Ed (N=1360)	43.5%	31.3%	9.0%	16.2%
Managing Employees				
Total Survey (N=8418)	38.0%	32.5%	9.8%	19.7%
H.S. Voc Ed (N=1364)	40.3%	30.3%	11.7%	17.7%
Marketing				
Total Survey (N=8385)	36.9%	27.5%	10.4%	25.2%
H.S. Voc Ed (N=1357)	41.5%	26.6%	9.5%	22.4%
Business Plan				
Total Survey (N=8403)	32.3%	34.5%	11.2%	22.1%
H.S. Voc Ed (N=1360)	35.8%	34.6%	10.5%	19.1%

HIGH SCHOOL VOCATIONAL EDUCATION BACKGROUND

A major area of interest in this research effort was to compare business owners having a high school vocational education background with business owners having no high school vocational education background. We discovered that those respondents having high school vocational education started their businesses at substantially earlier ages, reported higher than expected levels of education, and were more likely to operate in a rural setting.

As shown in figure 5, almost 75 percent of the business owners with high school vocational education started their businesses before the age of 35 compared to only 61 percent of their counterparts. Of greater interest is the observation that

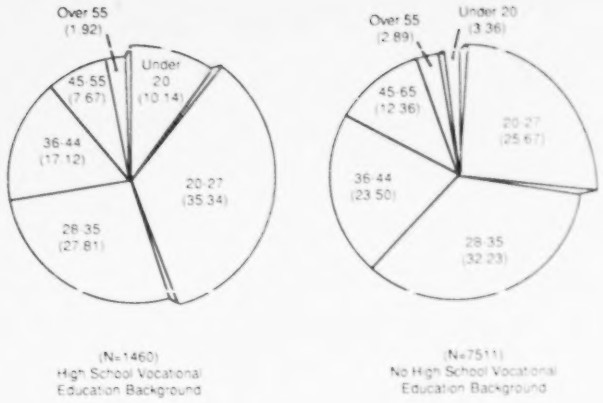

Figure 5. Age business owners with high school vocational education background started businesses.

business owners with high school vocational education were 16 percent more likely than their counterparts to have started their businesses before age 28.

When examining the educational attainments of the survey respondents, we learned that these business owners completed higher levels of education than is generally assumed (see figure 6). For those respondents having high school vocational education, nearly one in four reported receiving a bachelor's degree or better. Although this proportion may be about half that of the respondents with no high school vocational education (25 percent of the former compared to 45 percent of the latter), both respondent groups exceeded the levels of attainment for their respective peer groups in the general population. Interestingly, the survey results indicated very low proportions of business owners who were high school dropouts, especially among those who had been high school vocational students (3.5 percent for high school vocational and 7.4 percent for non-high school vocational).

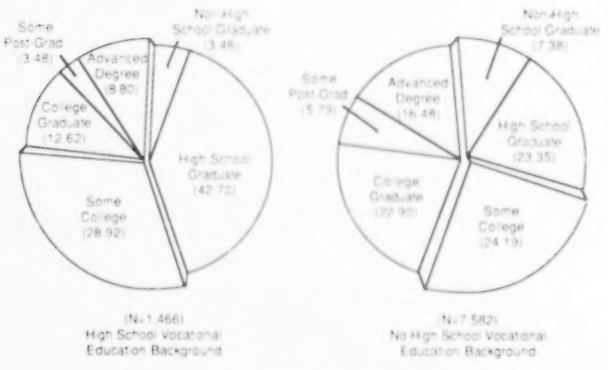

Figure 6. Latest level of education completed by business owners with high school vocational education background.

For regional economic development interests, the survey results indicated that business owners who had high school vocational education were more likely to be operating in rural areas than their nonvocational counterparts. As shown in figure 7, nearly one out of two high school vocational respondents were operating in rural areas, whereas only one out of three nonvocational respondents were located in rural settings.

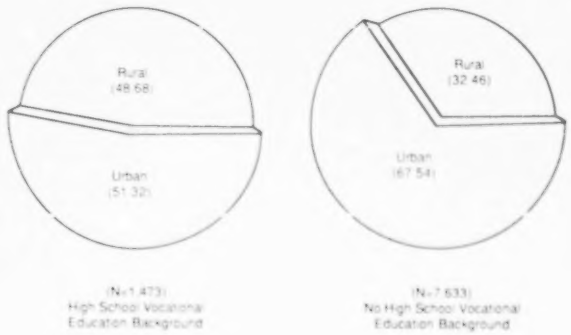

Figure 7. Percentage of survey respondents with rural/urban business locations by high school vocational education background.

Along with other research conducted at the National Center, this study confirms the overall significance of the family in making entrepreneurial career choices. It also suggests that family influences may play a larger role for potential entrepreneurs in high school vocational education programs (see figure 8.1).

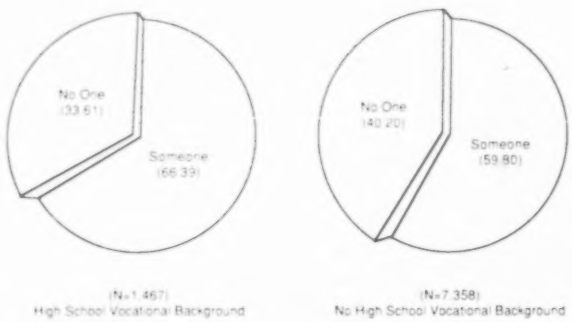

Figure 8.1. Percentage of survey respondents with relatives also in business by high school vocational education background.

Of greater interest is the fact that business owners having high school vocational education backgrounds showed greater percentages of

relatives in business across all categories of relatives than did their non-high school vocational counterparts (see figure 8.2). This suggests that respondents having high school vocational education reported disproportionately more combinations of multiple family members also in business than did their counterparts. Substantial differences occurred in the categories of parents and aunt/uncle.

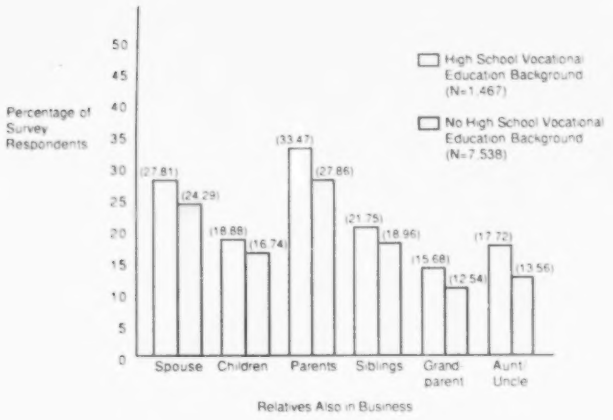

Figure 8.2. Percentage of survey respondents with relatives also in business by vocational education service area.

HIGH SCHOOL VOCATIONAL GRADUATES AS EMPLOYEES

A second interest area in this study was the examination of differences between various groupings of business owners and their perceptions of high school vocational graduates as employees. Although the survey results indicated little in the way of substantive differences among business owners, the survey did point to a general high regard for high school vocational graduates on the part of Ohio business owners.

A substantial number of business owners (54.5 percent) reported not having sufficient experience to decide whether high school vocational students were better prepared, as well, or less prepared than other entry-level employees. Of those who judged, the degree of positive support for vocational education was very dramatic. As shown in figure 9, more than 59 percent said vocational students were better prepared, whereas another 28 percent said they were as well prepared. This data refutes several widely publicized reports on the opinion business owners have of high school vocational education outcomes.

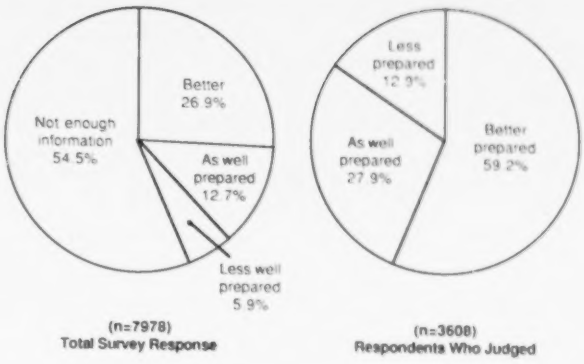

Figure 9. Perceptions of high school vocational education graduates as employees by total survey respondents and by those respondents who judged.

Business owners who helped vocational programs were particularly positive about the preparation of vocational education students. As shown in figure 10.1 the perceptions that vocational students were better prepared as entry-level employees dramatically increased among those that provided direct assistance to the program such as serving on an advisory committee, judging a student competitive event, providing resources for the program, being a coop employer, or serving as a class speaker.

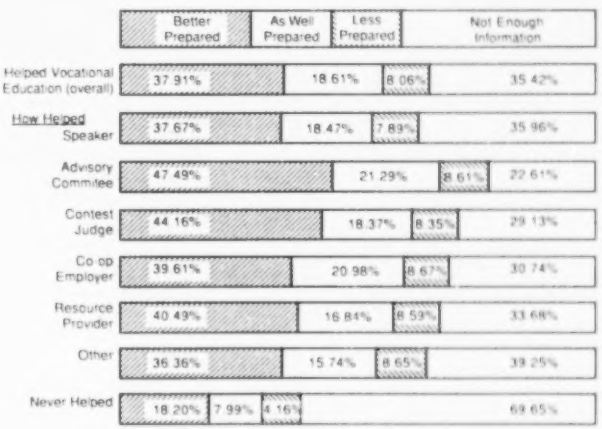

Figure 10.1. Vocational program assistance provided by perceptions of high school voc ed graduates as employees

In the analysis of the differing perceptions of high school vocational graduates across industry groups, as shown in figure 10.2, more than one in three business owners in the traditional industrial groupings of agriculture and durables manufac-

turing believed vocational graduates to be better prepared than their nonvocational counterparts. Nearly 30 percent of business owners in construction also felt vocational graduates to be better prepared.

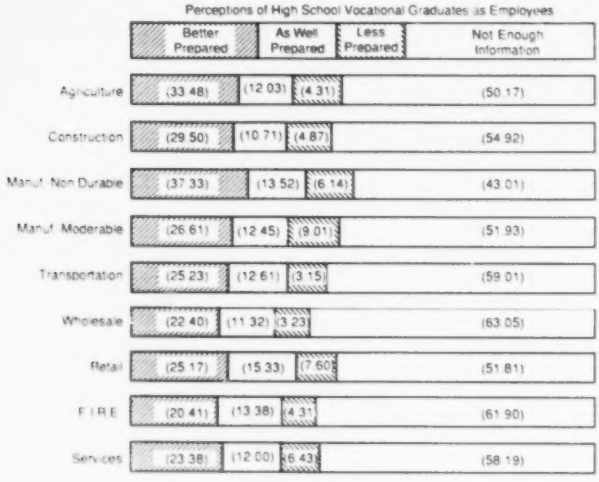
Perceptions of High School Vocational Graduates as Employees
Better Prepared
As Well Prepared
Less Prepared
Not Enough Information
Agriculture (33.48) (12.03) (4.31) (50.17)
Construction (29.50) (10.71) (4.87) (54.92)
Manuf. Non Durable (37.33) (13.52) (6.14) (43.01)
Manuf. Moderable (26.61) (12.45) (9.01) (51.93)
Transportation (25.23) (12.61) (3.15) (59.01)
Wholesale (22.40) (11.32) (3.23) (63.05)
Retail (25.17) (15.33) (7.60) (51.81)
F.I.R.E. (20.41) (13.38) (4.31) (61.90)
Services (23.38) (12.00) (6.43) (58.19)

Figure 10.2. Industry group by perceptions of high school vocational graduates as employees.

Of greater concern is that the survey results revealed a shortfall in positive perceptions of vocational graduates on the part of business owners in the more recent and faster growing industrial groupings of wholesale, services, and finance, insurance and real estate (F.I.R.E.). Perhaps this observation could serve as a valuable wellspring of policy relevant analyses and evaluations regarding future trends and changes in vocational education.

On the question of potential age bias, we found only minor differences in perceptions of high school vocational graduates across various respondent age ranges (see figure 10.3). It seems that approximately 28 percent of either younger business owners (age 20-27) or older business owners (age 45 and over) believed vocational graduates to be better prepared than their non-vocational counterparts. Fewer business owners (about 24 percent) in the middle age ranges (ages 28-44) believed that vocational graduates were better prepared.

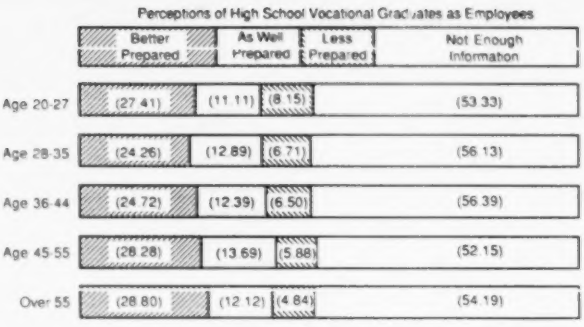
Perceptions of High School Vocational Graduates as Employees
Better Prepared
As Well Prepared
Less Prepared
Not Enough Information
Age 20-27 (27.41) (11.11) (8.15) (53.33)
Age 28-35 (24.26) (12.89) (6.71) (56.13)
Age 36-44 (24.72) (12.39) (6.50) (56.39)
Age 45-55 (28.28) (13.69) (5.88) (52.15)
Over 55 (28.80) (12.12) (4.84) (54.19)

Figure 10.3. Current age by perceptions of high school vocational graduates as employees.

Finally, sixty percent of the Ohio business owners reported having at least one high school vocational graduate as an employee. Business owners, with or without high school vocational background, were involved with hiring vocational graduates in a substantial way (see figure 11).

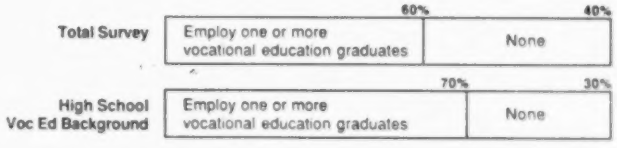

Figure 11. Percent of total respondents and respondents with high school vocational education who employ vocational education graduates

Those who employed one or more vocational education graduates were much more positive about how well vocational programs prepared students for entry level positions, as shown in figure 12.

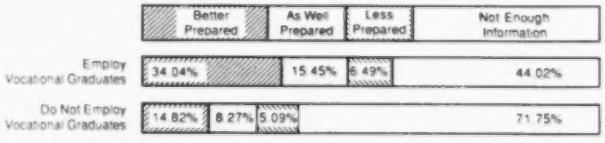

Figure 12. Respondents who employ and do not employ vocational education graduates by perceptions of vocational graduates as employees

CONCLUSION

Initial survey findings support the contention that vocational education exerts a broader impact on business ownership and entrepreneurship than common knowledge may suggest. The findings also indicate that vocational graduates—especially high school vocational graduates—represent a particularly rich resource pool of potential entrepreneurs. Finally, the findings show widespread positive perceptions of vocational graduates as employees.

Based on preliminary analysis of the data, we suggest the following implications for future curriculum and program development for vocational education to impact on the future economy of the state of Ohio:

- Emphasize integration of entrepreneurship concepts within career and vocational education
- Enable young people to see that they can start a business, and with vocational training they are likely to do it earlier
- Encourage vocational educators to work closely with business owners to increase their positive attitudes about vocational programs
- Target vocational leadership efforts to help women and minorities to move into the mainstream of business owner ship through vocational education
- Encourage vocational educators at the adult level to address creative ways to help Ohio business owners move their businesses from the subsistence level

The results reported in this issue of Facts & Findings are preliminary, descriptive analyses of the Ohio Entrepreneurs Survey data file. The data file has been copyrighted by The Ohio Division of Vocational and Career Education. However, readers may use the information included in this report without further permission. The study has received additional funding to conduct more sophisticated relational and correlational analyses.

For more information on the Ohio Entrepreneurs Survey and other entrepreneurship products or services available from the National Center, please contact John M. Bebris by calling 614-486-3655, or writing the National Center for Research in Vocational Education, The Ohio State University, 1960 Kenny Road, Columbus, Ohio 43210-1090.

• • • •

This study was sponsored by the Ohio Department of Education, Division of Vocational and Career Education. Additional co-sponsorship was provided by the Ohio Department of Development and the Columbus District of the U S Small Business Administration.

THE OHIO STATE UNIVERSITY